

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace all prior versions, and listings, of claims in the application:

LISTING OF CLAIMS:

1-53. (cancelled)

54. (new) A process for deriving dendritic cells from mononuclear cells in culture within 3 days wherein said mononuclear cells are peripheral blood mononuclear cells (PBMC) or CD14+ monocytes, comprising culturing said mononuclear cells with type I interferon (IFN) at a concentration greater than 400 IU/ml, and in the absence of IL-4.

55. (new) The process according to claim 54, wherein said type I IFN is selected from the group consisting of any natural IFN-alpha, any recombinant species of IFN-alpha, natural IFN-beta, recombinant IFN-beta and any synthetic type I IFN.

56. (new) The process according to claim 54, wherein said type I IFN is present in the culture medium at a concentration in a range of 400-10,000 IU/ml.

57. (new) The process according to claim 56, wherein type I IFN is present in the culture medium at a concentration in a range of 500-2,000 IU/ml.

58. (new) The process according to claim 57, wherein type I IFN is present in the culture medium at a concentration of 1,000 IU/ml.

59. (new) The process according to claim 54, further comprising adding a growth factor which promotes monocyte/dendritic cell survival in said culture medium.

60. (new) The process according to claim 59, wherein said growth factor is GM-CSF.

61. (new) The process according to claim 60, wherein said GM-CSF is at a concentration in a range of 250-1,000 IU/ml.

62. (new) The process according to claim 54, further comprises contacting dendritic cells, obtained by treating mononuclear cells with type I-IFN, with a maturation agent.

63. (new) A method for the ex vivo derivation of dendritic cells from mononuclear cells within 3 days of culture, wherein said mononuclear cells are peripheral blood mononuclear cells (PBMC) or CD14+ monocytes, comprising culturing type I IFN with said mononuclear cells from the beginning of said culture at a concentration greater than 400 IU/ml, in the absence of IL-4.

64. (new) The method according to claim 63, wherein said type I IFN is cultured in combination with a growth factor.

65. (new) The method according to claim 63, wherein said type I IFN concentration is in a range of 40-10,000 IU/ml.

66. (new) The method according to claim 63, wherein said type IFN concentration is in a range of 500-2,000 IU/ml.

67. (new) The method according to claim 66, wherein said type I IFN concentration is 1,000 IU/ml.

68. (new) A process for deriving dendritic cells from peripheral blood mononuclear cells (PBMC) or CD14+ monocytes, comprising culturing said PBMC and CD14+ monocytes, in the absence of IL-4, with type I interferon (IFN) at a concentration of 400-10,000 IU/ml and GM-CSF in a concentration of 250-1,000 IU/ml, and isolating said dendritic cells within 3 days of culturing.

69. (new) A method for the ex vivo derivation of dendritic cells from mononuclear cells within 3 days of culture, wherein said mononuclear cells are peripheral blood mononuclear cells (PBMC) or CD14+ monocytes, comprising culturing said peripheral blood mononuclear cells (PBMC) or CD14+ monocytes in a culture with type I IFN at a concentration 400-10,000 IU/ml and GM-CSF in a concentration of 250-1,000 IU/ml and wherein Il-4 is not present in the culture.

70. (new) The method according to claim 69, wherein said type IFN concentration is in a range of 500-2,000 IU/ml.

71. (new) The method according to claim 70, wherein said type I IFN concentration is 1,000 IU/ml.